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MARKET RISK PREMIUM USED IN 2010 BY ANALYSTS AND COMPANIES: A SURVEY WITH 2,400 ANSWERS

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MARKET RISK PREMIUM USED IN 2010 BY ANALYSTS AND COMPANIES: A SURVEY WITH 2,400 ANSWERS

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Abstract

The average MRP used by analysts in the United States and Canada (5.1%) was similar to the one used by their colleagues in Europe (5.0%), and United Kingdom (5.2%). But the average MRP used by companies in the United States and Canada (5.3%) was smaller than the one used by companies in Europe (5.7%), and United Kingdom (5.6%).

The dispersion of the MRP used was high, but lower than that of the professors: the average range of MRP used by analysts (companies) for the same country was 5.7% (4.1%) and the average standard deviation was 1.7% (1.2%). These statistics were 7.4% and 2.4% for the professors.

Most previous surveys have been interested in the Expected MRP, but this survey asks about the Required MRP. The paper also contains the references that analysts and companies use to justify their MRP, as well as comments from 89 respondents illustrating the various interpretations of what the required MRP is.

JEL Classification: G12, G31, M21

Keywords: market risk premium, required equity premium, expected equity premium, historical equity premium.

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MARKET RISK PREMIUM USED IN 2010 BY ANALYSTS AND COMPANIES: A SURVEY WITH 2,400 ANSWERS

I sent a short email (see Exhibit 1) on April 2010 to about 8,500 email addresses, of analysts and managers of companies, obtained from previous correspondence, papers and webs. I asked about the Market Risk Premium (MRP) ***"used to calculate the required return to equity"*** in 2010 and in 2009. I also asked about "*Books or articles that I use to support this number.*"

By May 10, 2010, I had received 2,460 responses: 711 from analysts and 1,749 from other companies.[1] Of these answers, 601 analysts and 901 companies provided a specific MRP used in 2010.

1. Market Risk Premium (MRP) Used in 2010 by Analysts

Table 1

MRP used by analysis in 2010: 711 answers

	United States and Canada	Europe	United Kingdom	Other	Sum
Answers reported	**107**	**197**	**31**	**266**	**601**
Do not provide a figure:					
"My MRP changes weekly" or *"monthly"*	40	31	19	3	93
"It is confidential"	7	8	2		17

Euro: Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden and Switzerland.

Other: Argentina, Australia, Brazil, Chile, China, Colombia, Czech Republic, Dominican Republic, Dubai, Egypt, Hong Kong, Hungary, India, Indonesia, Iran, Israel, Japan, Kazakhstan, Kuwait, Malaysia, Mexico, New Zealand, Pakistan, Peru, Poland, Qatar, Romania, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Sri Lanka, Taiwan, Thailand, Turkey, UA Emirates, Ukraine, Uruguay, Venezuela and Vietnam.

[1] I also received answers from 1,511 professors. I analyse them in the separate document. *"Market Risk Premium Used in 2010 by Professors: a Survey with 1,500 Answers":* http://ssrn.com/abstract=1606563

Table 2 contains the statistics of the MRP used in 2010. It is worth mentioning that the average MRP used by analysts in the United States and Canada (5.1%) was similar to the one used by their colleagues in Europe (5.0%), and UK (5.2%).[2] Figure 1 is a graphical representation of the 601 MRPs considered in Table 2.

Table 2

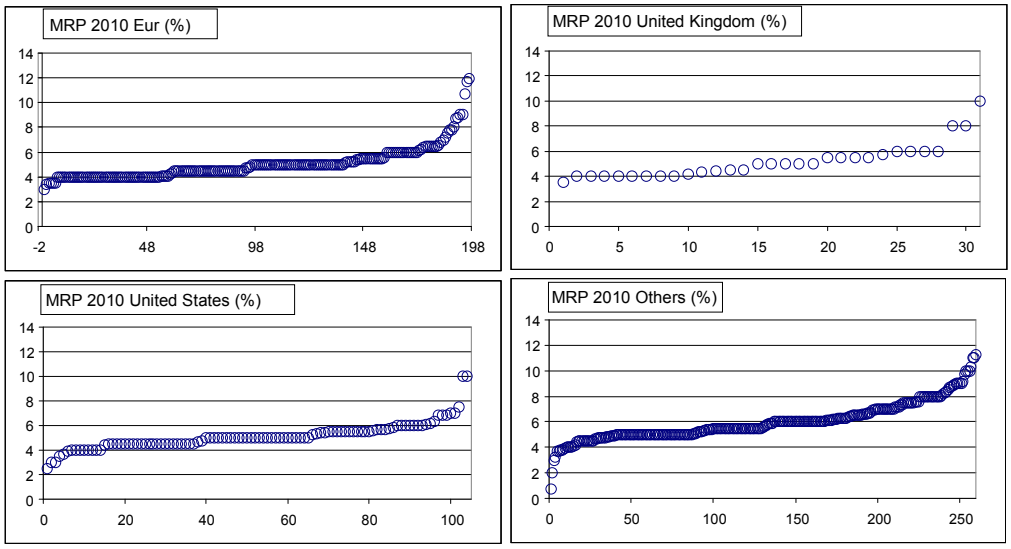
Market Risk Premium used in 2010 by 601 analysts

		United States and Canada	Euro	UK	Other	Sum
MRP used in 2010	**Average**	**5.1**	**5.0**	**5.2**	**6.3**	
	St. dev.	1.1	1.3	1.4	2.2	
	Max.	10.0	11.9	10.0	25.0	
	Q3	5.5	5.5	5.7	7.0	
	Median	5.0	5.0	4.5	5.9	
	Q1	4.5	4.0	4.0	5.0	
	Min.	2.5	3.0	3.5	0.7	
	Number	104	197	31	269	**601**
Justify the number*:						
Own research/calculations		*24*	*70*	*5*	*96*	***195***
I do not justify the number / do not answer		*33*	*64*	*13*	*55*	***165***
Reference to books or articles		*33*	*40*	*8*	*69*	***150***
Historic Data		*12*	*19*	*3*	*49*	***83***
Other analysts		*2*	*2*	*0*	*3*	***7***
Experience, subjective, own judgment		*8*	*9*	*1*	*17*	***35***

* Some respondents provided more than one answer.

Figure 1

Market Risk Premium used in 2010 by 601 analysts



[2] 43 analysts provided a range with an average spread of 0.6%: I considered the medium point of the range.

2. MRP Used by Analysts in 2010 and in 2009

514 analysts indicated which MRP they used in 2009. Figure 2 shows the difference between the MRP used in 2010 and the MRP used in 2009 for each one of the respondents.

32% of the analysts decreased the MRP in 2010 (-1% on average),

57% used the same MRP, and

11% increased it (1.3% on average).

Figure 2

[MRP used in 2010] – [MRP used in 2009] by 601 analysts

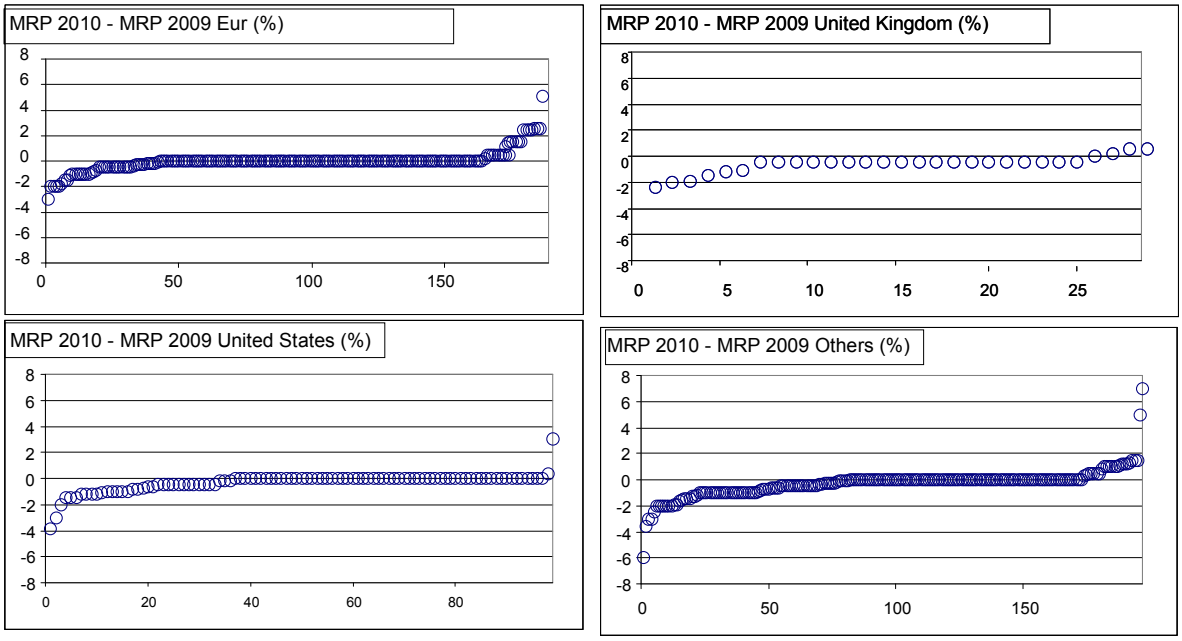


Table 3 contains the main statistics of the difference [MRP used in 2010] - [MRP used in 2009].

Table 3

[MRP used in 2010] – [MRP used in 2009] by analysts

		United States and Canada	Euro	United Kingdom	Other	All
MRP used in 2010 - MRP used in 2009	**Average**	**-0,3**	**0,0**	**-0,1**	**-0,3**	**-0,2**
	St. dev.	0.7	0.7	0.7	1.1	0.9
	Max.	3.0	4.6	1.0	7.0	7.0
	Median	0.0	0.0	0.0	0.0	0.0
	Min.	-3.9	-3.0	-2.0	-6.0	-6.0
	Number	99	189	29	197	**514**
	< 0	36	42	6	82	**166**
	= 0	61	122	19	91	**293**
	> 0	2	25	4	24	**55**

3. MRP Used by Analysts in 2010: a Closer Look by Country

Table 4 contains the statistics by country of the MRP used in 2010. We only report statistics for the 22 countries with 5 or more answers. The average MRP used by analysts in the United States (5.12%) was higher than the one used by their colleagues in any European country. Figure 3 is a graphic representation of the results of Table 4.

Table 4

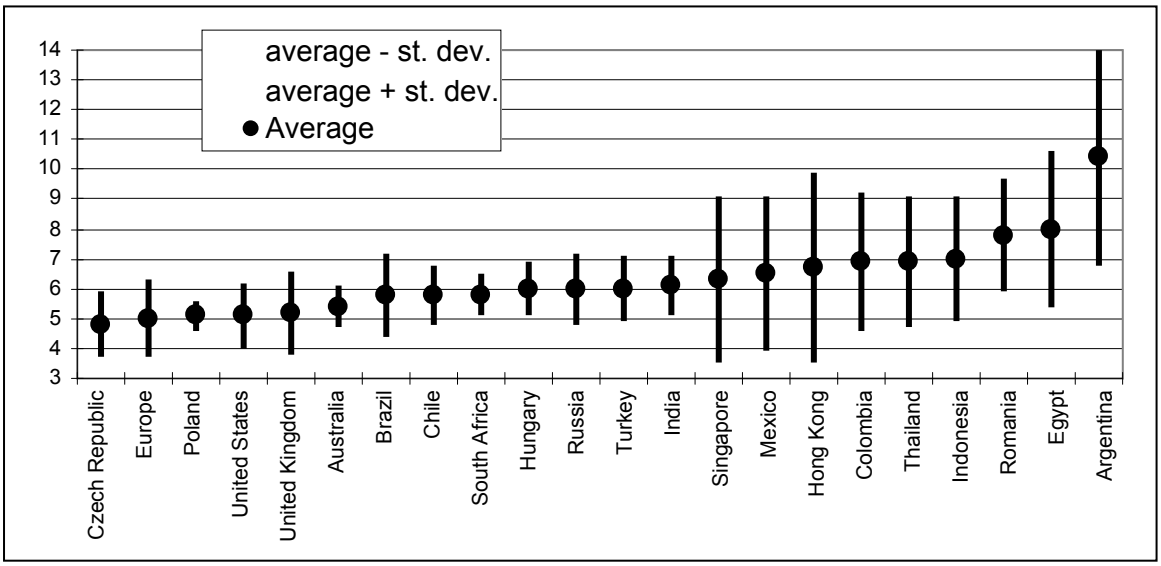
Market Risk Premium used in 2010 by analysts of 22 different countries

	Average	St. dev.	Max.	Q3	**Median**	Q1	Min.	Number of analysts
Argentina	**10.4**	3.6	14.5	14.0	**8.6**	8.0	6.4	5
Australia	**5.4**	0.7	6.0	6.0	**5.5**	5.0	4.1	7
Brazil	**5.8**	1.4	10.0	6.0	**5.6**	5.3	2.0	36
Colombia	**6.9**	2.3	12.0	7.3	**6.4**	5.7	4.5	8
Czech Republic	**4.8**	1.1	6.0	5.5	**4.8**	5.5	3.0	6
Chile	**5.8**	1.0	8.0	6.2	**5.8**	5.1	3.8	14
Egypt	**8.0**	2.6	13.7	8.2	**8.0**	6.4	5.4	8
Europe	**5.0**	1.3	11.9	5.5	**5.0**	4.0	3.0	197
Hong Kong	**6.7**	3.2	12.5	9.0	**5.0**	4.2	3.7	9
Hungary	**6.0**	0.9	7.5	6.3	**5.5**	5.5	5.3	5
India	**6.1**	1.0	7.5	7.0	**6.0**	5.2	5.0	10
Indonesia	**7.0**	2.1	11.0	8.0	**6.2**	5.4	5.0	7
Mexico	**6.5**	2.6	15.0	7.3	**5.5**	5.0	3.7	20
Poland	**5.1**	0.5	6.5	5.4	**5.0**	4.8	4.5	18
Romania	**7.8**	1.9	10.0	8.8	**7.6**	7.2	5.0	5
Russia	**6.0**	1.2	8.9	6.5	**5.5**	5.0	5.0	11
Singapore	**6.3**	2.8	10.3	8.0	**4.6**	4.4	3.9	5
South Africa	**5.8**	0.7	7.3	6.0	**6.0**	5.0	4.9	13
Thailand	**6.9**	2.2	12.0	7.5	**6.4**	5.0	4.9	13
Turkey	**6.0**	1.1	8.3	6.6	**6.0**	5.0	4.5	21
United Kingdom	**5.2**	1.4	10.0	5.7	**5.0**	4.1	3.5	31
United States	**5.1**	1.1	10.0	5.5	**5.0**	4.5	2.5	104
Grand Total	**5.6**	1.9	25.0	6.0	**5.0**	4.5	0.7	601

Figure 3

MRP used in 2010 by analysts for different countries

For each country the average, (average + σ) and (average - σ) are shown



4. Market Risk Premium (MRP) Used in 2010 by Companies

Table 5

MRP used in 2010 by companies

	United States	Europe	United Kingdom	Other	Sum
Answers reported	**205**	**543**	**30**	**123**	**901**
Outliers	**2**	**9**			**11**
MRP is confidential	**39**	**17**	**9**	**5**	**70**
Companies that do NOT use MRP	**153**	**405**	**65**	**144**	**767**
Use a minimum IRR	*48*	*75*	*42*	*107*	
Use a required return to equity	*7*	*12*	*3*		
Use other criteria	*4*	*11*	*2*	*5*	
"MRP is a concept that we do not use"	*54*	*307*	*18*	*32*	

Euro: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

Other: Argentina, Australia, Barbados, Brazil, Chile, Colombia, Ecuador, India, Iran, Israel, Japan, Kazakhstan, Morocco, Mexico, New Zealand, Peru, Poland, Russia, South Africa, Turkey, Ukraine and Vietnam.

Table 6 contains the statistics of the MRP used in 2010. Figure 4 is a graphic representation of the 902 MRPs considered in Table 6.

Table 6

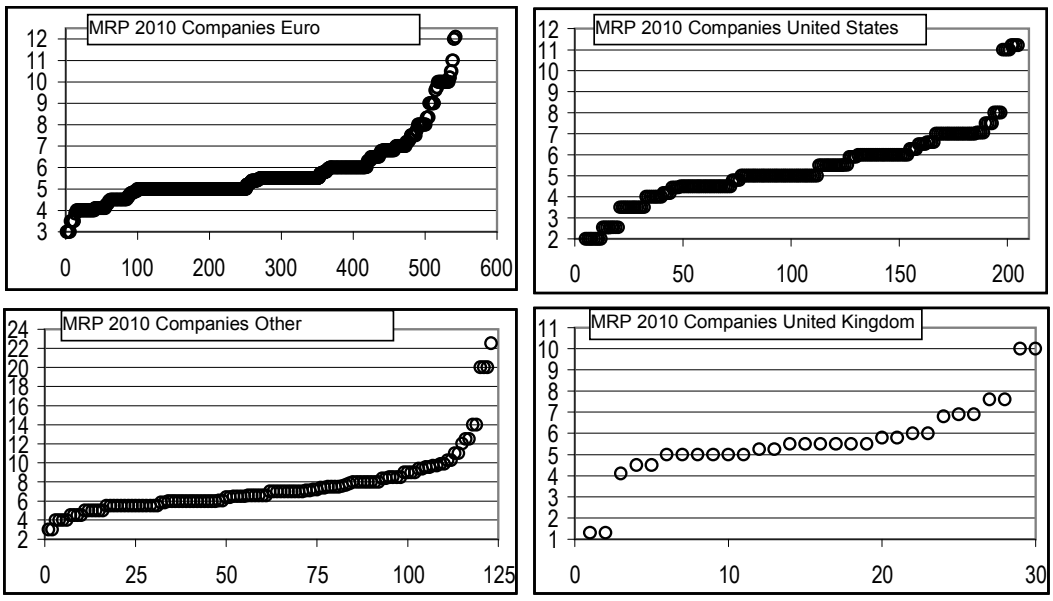
Market Risk Premium used in 2010 by companies

		United States	Euro	United Kingdom	Other	Sum
MRP used in 2010	**Average**	5.3	5.7	5.6	7.5	
	Median	5.0	5.5	5.5	7.0	
	St. dev.	1.8	1.5	1.8	3.2	
	Max.	11.2	12.1	10.0	22.5	
	Min.	1.9	3.0	1.3	3.0	
	Number	205	543	30	123	**901**
Justify the number*:						
Own research/calculations		*38*	*67*	*5*	*21*	*131*
I do not justify the number / do not answer		*40*	*154*	*5*	*34*	*233*
Reference to books or articles		*96*	*229*	*18*	*54*	*397*
Historic Data		*8*	*53*	*3*	*18*	*82*
Implied Market Risk Premium		*12*	*41*	*2*	*0*	*55*
Analyst reports		*3*	*46*	*0*	*2*	*51*

* Some respondents provided more than one answer.

Figure 4

Market Risk Premium used in 2010 by companies



5. MRP Used by Companies in 2010 and in 2009

845 companies indicated which MRP they used in 2009. Figure 5 shows the difference between the MRP used in 2010 and the MRP used in 2009:

32% of the companies decreased the MRP in 2010 (-1% on average),

57% used the same MRP, and

11% increased it (1.3% on average).

Figure 5

[MRP used in 2010] – [MRP used in 2009] by companies

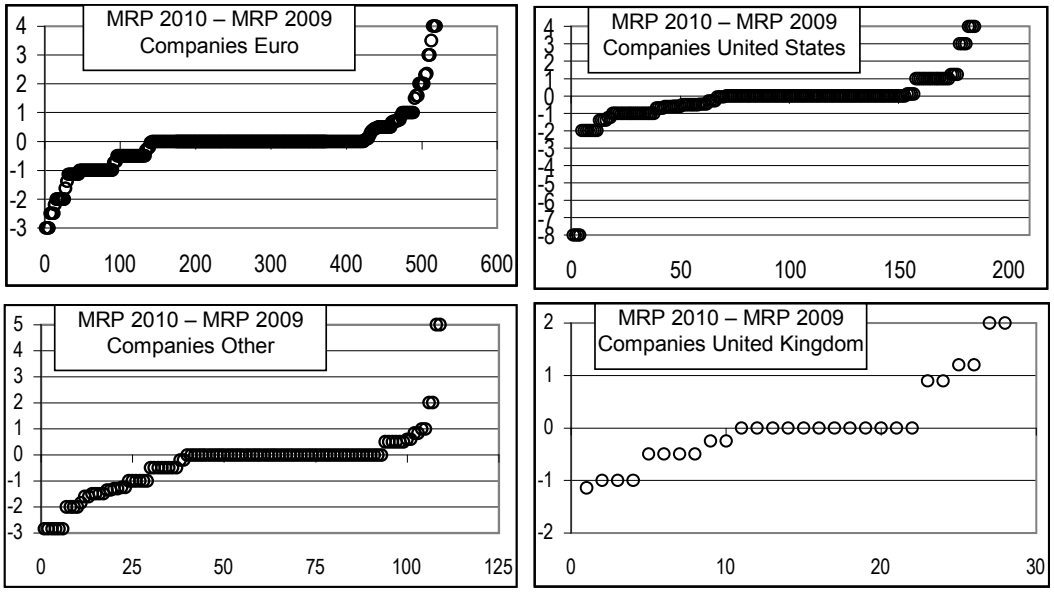


Table 7 contains the main statistics of the difference [MRP used in 2010] - [MRP used in 2009].

Table 7

[MRP used in 2010] – [MRP used in 2009] by companies

		United States	Euro	United Kingdom	Other	All
MRP used in 2010 - MRP used in 2009 (%)	**Average**	-0.13	-0.07	0.06	-0.30	-0.11
	St. dev.	1.7	1.0	0.8	1.2	1.2
	Max.	4.1	4.0	2.0	5.0	5.0
	Median	0.0	0.0	0.0	0.0	0.0
	Min.	-8.0	-3.0	-1.1	-2.8	-8.0
	Number	189	519	28	109	845
	< 0	70	141	10	39	260
	= 0	83	282	12	54	431
	> 0	36	96	6	16	154

6. References Used by Companies and Analysts to Justify the MRP Figure

436 analysts and 639 companies indicated which books or papers they use as reference to justify the MRP that they use (127 of them provided more than a reference). Table 8 contains the most cited references.

Table 8

References used by companies and analysis to justify the Market Risk Premium

	Companies					Analysts				
	United States	Euro	United Kingdom	Other	All	United States and Canada	Euro	United Kingdom	Other	All
Internal estimate	38	67	5	21	131	23	65	5	91	184
Damodaran	12	83	5	18	118	15	15	0	43	73
Morningstar/Ibbotson	40	32	8	10	90	10	9	3	10	32
Historic data	8	39	3	14	64	6	14	3	39	62
Implied MRP	12	41	2	0	55	1	5	0	5	11
Analysts / Other analysts	3	46	0	2	51	2	2	0	3	7
McKinsey, Copeland	4	40	1	0	45	6	8	0	7	21
Fernández	4	31	0	4	39	1	2	0	1	4
Experience, subjective, own judgment	12	14	0	8	34	5	7	1	14	27
Surveys, conversations…	8	10	0	4	22	3	2	0	3	8
Brealy and Myers	8	14	0	0	22	0	0	0	2	2
Bloomberg	0	16	0	4	20	5	5	0	11	21
Dimson, Marsh, and Staunton	4	8	4	0	16	3	3	2	1	9
CFA books	4	2	0	4	10	2	0	0	3	5
Fama and French (2002)	0	4	0	2	6	2	0	0	1	3
Grabowski / Pratt's and Grabowski	0	0	0	0	0	3	0	1	1	5
Mehra and Prescott	0	0	0	0	0	1	1	0	1	3
Other	19	37	11	7	74	8	16	6	19	49

7. MRP Used by Companies in 2010: a Closer Look by Country

Table 9 contains the statistics by country of the MRP used in 2010. We only report statistics for the 26 countries with 5 or more answers.

Table 9

Market Risk Premium used in 2010 by companies in 26 different countries

	Aver.	Std. dev.	Median	Max.	Min.	Count.
Austria	5.3	0.7	5.3	6.8	4.1	10
Belgium	5.3	0.6	5.3	6.8	4.1	11
Brazil	7.3	1.9	6.8	9.7	4.5	12
Chile	7.4	3.1	6.5	14.0	4.0	14
Denmark	5.2	1.1	5.0	7.0	4.0	12
Finland	5.0	0.9	5.0	6.8	4.0	10
France	5.6	0.7	5.5	6.8	4.1	20
Germany	5.9	1.0	6.0	8.0	4.1	20
Greece	5.7	0.9	5.8	6.8	4.1	10
India	7.9	0.8	8.0	9.0	6.6	11
Ireland	5.5	0.8	5.5	6.8	4.1	8
Israel	5.9	1.1	5.9	7.0	4.5	7
Italy	5.8	1.4	5.3	9.6	4.1	22
Mexico	6.9	3.0	5.5	12.5	4.0	13
Netherlands	5.3	0.9	5.0	6.8	4.1	12
Norway	5.0	1.0	5.0	6.8	4.0	8
Peru	7.6	1.7	8.0	9.9	5.5	10
Poland	5.8	0.3	6.0	6.0	5.5	6
Portugal	5.4	0.7	5.5	6.8	4.1	9
South Africa	5.8	0.3	6.0	6.0	5.5	6
Spain	5.9	1.7	5.5	12.1	3.0	369
Sweden	5.3	0.6	5.5	6.8	4.1	12
Switzerland	5.2	0.8	5.0	6.8	4.1	8
United Kingdom	5.6	1.8	5.5	10.0	1.3	30
United States	5.3	1.8	5.0	11.2	1.9	205
Vietnam	13.3	6.4	12.0	20.0	7.2	5

8. Differences in the MRP Used by Analysts, Companies and Professors

Table 10 shows the MRPs used in 2010 by analysts and professors for different countries. Professors used for almost every country, on average, a higher MRP than analysts. The dispersion of the MRPs used by professors was also higher than that of the analysts.

Table 10

Difference between analyst and professors in their estimations of the MRP in 2010

	Analysts						Professors					
	Average	Median	St. dev.	Max.	Min.	Answers	Average	Median	St. dev.	Max.	Min.	Answers
Argentina	**10.4**	8.6	3.6	14.5	6.4	5	**12.4**	7.1	8.9	25.0	4.3	5
Australia	**5.4**	5.5	0.7	6.0	4.1	7	**6.1**	6.0	1.9	10.0	4.0	21
Brazil	**5.8**	5.6	1.4	10.0	2.0	36	**6.8**	6.0	1.1	9.0	6.0	9
Colombia	**6.9**	6.4	2.3	12.0	4.5	8	**8.7**	7.3	4.7	15.0	3.4	5
Egypt	**8.0**	8.0	2.6	13.7	5.4	8	**7.1**	7.0	2.0	9.0	4.1	7
Europe	**5.0**	5.0	1.3	11.9	3.0	197	**5.3**	5,0	1,7	12.0	2.0	194
India	**6.1**	6.0	1.0	7.5	5.0	10	**10.3**	8.5	6.6	30.0	4.4	13
Mexico	**6.5**	5.5	2.6	15.0	3.7	20	**10.9**	9.1	7.3	25.0	5.5	6
Poland	**5.1**	5.0	0.5	6.5	4.5	18	**6.3**	6.5	1.2	8.0	4.4	6
Singapore	**6.3**	4.6	2.8	10.3	3.9	5	**8.4**	7.2	2.5	12.0	6.0	5
South Africa	**5.8**	6.0	0.7	7.3	4.9	13	**5.5**	6.0	1.3	7.0	4.0	8
Turkey	**6.0**	6.0	1.1	8.3	4.5	21	**8.0**	6.0	4.7	16.0	4.5	5
United Kingdom	**5.2**	5.0	1.4	10.0	3.5	31	**5.0**	5.0	1.6	10.3	2.5	49
United States	**5.1**	5.0	1.1	10.0	2.5	104	**6.0**	6.0	1.7	12.0	2.0	462

Table 11 shows the MRPs used in 2010 by professors, analysts and companies for United States, Euro, United Kingdom and other countries. Professors had a higher dispersion than analysts and companies. Figure 7 is a graphic representation of the main results of Table 11.

Table 12 shows the MRPs used in 2010 and 2009 by professors, analysts and companies for United States, Euro, United Kingdom and other countries. The average MRP used by the groups in 2010 is lower than the one used in 2009. Figure 8 is a graphic representation of the main results of Table 11.

Table 11

Market Risk Premium used in 2010 by professors, analysts and companies in some countries

	Analysts			Professors			Companies		
	Average	Median	St. dev.	Average	Median	St. dev.	Average	Median	St. dev
Brazil	**5.8**	5.6	1.4	**6.8**	6.0	1.1	**7.3**	6.8	1.9
Europe	**5.0**	5.0	1.3	**5.3**	5.0	1.7	**5.7**	5.5	1.5
India	**6.1**	6.0	1.0	**10.3**	8.5	6.6	**7.9**	8.0	0.8
Mexico	**6.5**	5.5	2.6	**10.9**	9.1	7.3	**6.9**	5.5	3.0
Poland	**5.1**	5.0	0.5	**6.3**	6.5	1.2	**5.8**	6.0	0.3
South Africa	**5.8**	6.0	0.7	**5.5**	6.0	1.3	**5.8**	6.0	0.3
United Kingdom	**5.2**	5.0	1.4	**5.0**	5.0	1.6	**5.6**	5.5	1.8
United States	**5.1**	5.0	1.1	**6.0**	6.0	1.7	**5.3**	5.0	1.8

	Analysts			Professors			Companies		
	Max.	Min	Answers	Max.	Min.	Answers	Max.	Min.	Answers
Brazil	10.0	2.0	36	9.0	6.0	9	9.7	4.5	12
Europe	11.9	3.0	197	12.0	2.0	194	12.1	3.0	543
India	7.5	5.0	10	30.0	4.4	13	9.0	6.6	11
Mexico	15.0	3.7	20	25.0	5.5	6	12.5	4.0	13
Poland	6.5	4.5	18	8.0	4.4	6	6.0	5.5	6
South Africa	7.3	4.9	13	7.0	4.0	8	6.0	5.5	6
United Kingdom	10.0	3.5	31	10.3	2.5	49	10.0	1.3	30
United States	10.0	2.5	104	12.0	2.0	462	11.2	1.9	205

Table 12

Market Risk Premium used in 2010 and in 2009 by professors, analysts and companies

		2010				2009			
		United States	Euro	United Kingdom	Other	United States	Euro	United Kingdom	Other
Professors	**Average**	**6.0**	**5.3**	**5.0**	**7.8**	6.4	5.4	4.9	8.9
Analysts	**Average**	**5.1**	**5.0**	**5.2**	**6.3**	5.5	5.1	5.3	6.3
Companies	**Average**	**5.3**	**5.7**	**5.6**	**7.5**	5.5	5.8	5.9	7.3
Professors	**St. dev.**	**1.7**	**1.7**	**1.6**	**4.2**	2.4	1.9	1.5	3.8
Analysts	**St. dev.**	**1.1**	**1.3**	**1.4**	**2.2**	1.3	1.2	1.2	2.0
Companies	**St. dev.**	**1.8**	**1.5**	**1.8**	**3.2**	1.8	1.6	0.8	2.3
Professors	**Median**	**6.0**	**5.0**	**5.0**	**7.0**	6.0	5.0	5.0	7.1
Analysts	**Median**	**5.0**	**5.0**	**4.5**	**5.9**	5.0	5.0	5.0	6.0
Companies	**Median**	**5.0**	**5.5**	**5.5**	**7.0**	5.5	5.5	5.8	7.0
Professors	**Respondents**	**462**	**194**	**49**	**145**	448	194	49	140
Analysts	**Respondents**	**104**	**197**	**31**	**269**	99	189	29	197
Companies	**Respondents**	**205**	**543**	**30**	**123**	189	521	28	109

Figure 6

MRP used in 2010 by analyst, professors and companies for different countries

The chart shows the average and the interval [(average - σ) , (average + σ)]

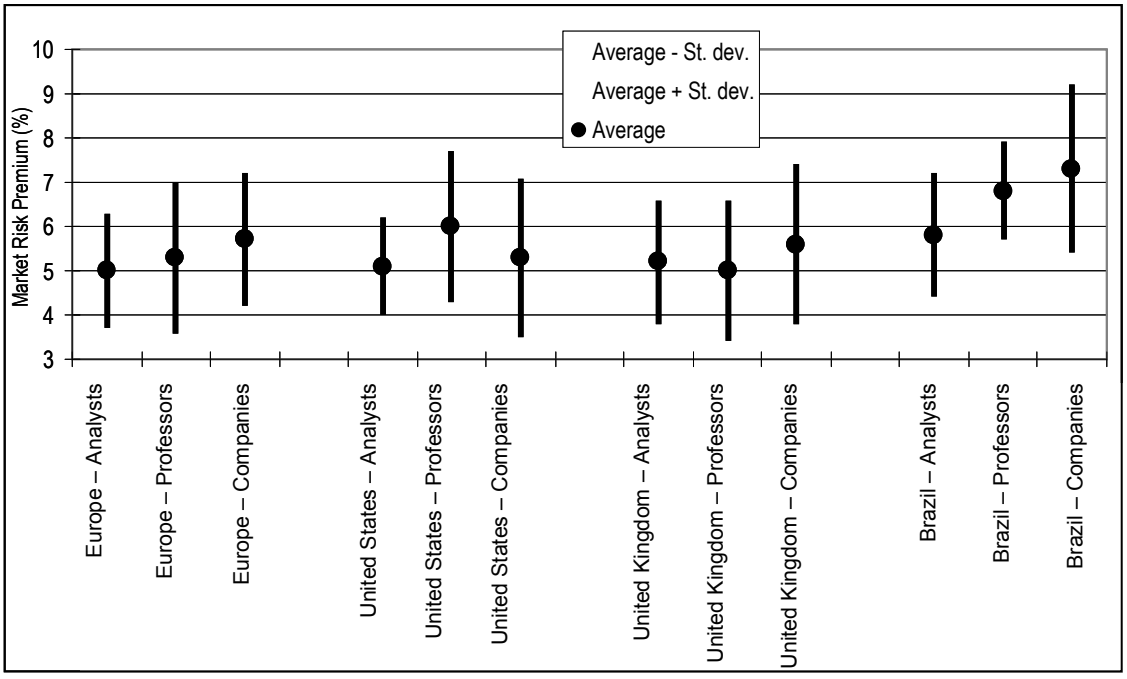
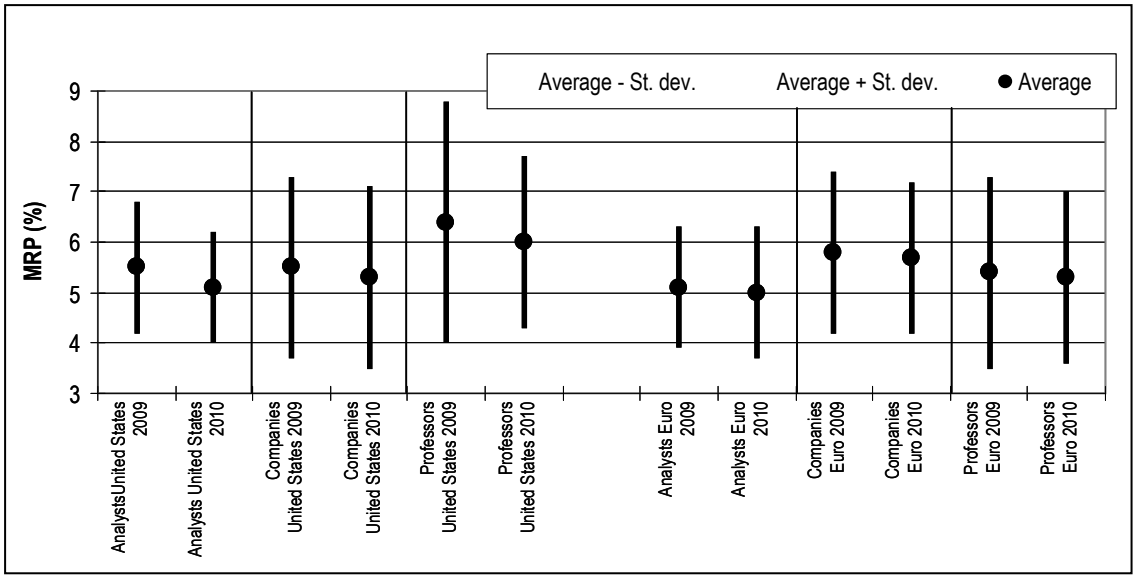


Figure 7

MRP used in 2010 and 2009 by analyst, professors and companies for United States and Europe

The chart shows the average and the interval [(average - σ) , (average + σ)]



9. Conclusion

Most surveys have been interested in the Expected MRP, but this survey asks about the Required MRP.

The average MRP used by analysts in the United States and Canada (5.1%) was similar to the one used by their colleagues in Europe (5.0%), and United Kingdom (5.2%). But the average MRP used by companies in the United States and Canada (5.3%) was smaller than that used by companies in Europe (5.7%), and United Kingdom (5.6%).

The dispersion of the MRP used was high, but lower than that of the professors: the average range of MRP used by analysts (companies) for the same country was 5.7% (4.1%) and the average standard deviation was 1.7% (1.2%). These statistics were 7.4% and 2.4% for the professors.

The paper also contains the references that analysts and companies use to justify their MRP, as well as comments from 89 respondents that illustrate the various interpretations of what the required MRP is.

Exhibit 1

Mail sent on April and May 2010

I am doing a survey about the Market Risk Premium (MRP) that companies, analysts and professors use to calculate the required return to equity in different countries.

I would be very grateful if you would kindly reply to the following 3 questions.

Of course, no individuals, universities or companies will be identified and only aggregate data will be made public.

Best regards and thanks,

Pablo Fernández
Professor of Finance. IESE Business School. Spain

3 questions:

1. The Market Risk Premium that I am using in 2010 is: _____%

2. Books or articles that I use to support this number:

3. Last year, I used a different MRP: _____%

Comments

Exhibit 2

Comments of Analysts and Companies that did not provide the MRP used in 2010

1. I regularly use the Monthly CRSP index return (value weighted to reduce the effect of low liquidity small stocks) then subtract the United States one month T-bill.

2. I use a 'rule of thumb' discount rate of 10% and a further (arbitrary) discount rate to proxy remaining project execution risk.

3. Average long term yield on government bonds for companies that we follow in United Kingdom/Europe.

4. Banks to me are giant bond portfolios and should trade at off book value, the is usually supported by some type of earnings multiple, which is higher dependent on the ROEs of the business. Higher the ROE of course, the higher the multiples.

5. Biotech companies: the lowest discount factor I use this year and last year is 12%.

6. DCF's are too sensitive and arbitrary.

7. Our shareholders expect a minimum IRR of 20%

8. Our group is not listed and does not invest in the stock market. We have no risk Premium criterion for shares.

9. For the large cap oil stocks that I cover – I use an Equity Risk Premium in my DCF valuations ranging from 5.0% to 7.5% based on market of inception ERP skewed by an appreciation of the geographical bias (and therefore political risk) for operations.

10. For valuing biotech companies, depending on the stage of development of the drugs, I use a different rate which also must take into account another discount rate reflection how novel the technology is. My discount rate varies between 30-70% for non-revenue companies.

11. I can't really disclose our assumptions as it is part of the "research", which is exclusively disclosed to our clients (apart from selective dispatch press).

12. I do not make these calculations in my work, but rather follow what the market tells me.... I am only an observer.

13. I do not use cost of capital method to value securities – PE multiple is the predominantly used metric.

14. I don't use it – as far as I am concerned it is not a number of any worth to me. It is either subjective, or wrong. Too theoretical, he said heretically! It is not quite all about the numbers...

15. I rarely use CAPM in valuation.

16. I really do not put a market risk premium on my price targets. While I should use DCF calculations more often, I have found that in the real world these either: 1) do not play out due to the lack of pure information that only insiders have, or 2) the length of time it takes for the DCF scenario to play out is well beyond 2-3 years, and I am charged with a 6-18 month outlook, and this time frame is often driven largely by other factors.

Exhibit 2 (continued)

17. While I should use DCF calculations more often, I have found that in the real world these either: 1) do not play out due to the lack of pure information that only insiders have, or 2) the length of time it takes for the DCF scenario to play out is well beyond 2-3 years, and I am charged with a 6-18 month outlook, and this time frame is often driven largely by other factors.

18. I really don't use a fixed MRP. We invest primarily in private companies. Beta, CAPM, etc. are frameworks that don't apply well to how we view risk/return and ultimately how we derive required return on specific investments. For us it is as much art as it is science.

19. I use cost of debt + 300bps for cost of equity.

20. I use the market measured risk premium. I do not use books to justify the method. Variations occur in the MRP all the time.

21. If we do MRP we just take it from Bloomberg (VERY rarely).

22. I'm afraid we don't use a formal MRP. The events of last 2 years have rather dissuaded investors asking about such things – prices of equities seen to be driven much more by animal spirits than by theoretical WACC calcs. We rather boringly use WACCs of 8-9% for large FTSE corporates when calculating DCFs if only because they seem to be the industry norm.

23. I can't stress enough though how much distrust there is with DCF as a valuation methodology now – risk aversion means short term earnings and cash flow metrics rule.

24. In valuing my universe of small companies, I do not specifically take into account the expected return on stocks or the risk free return.

25. Risk Premium is a concept that I learned and which isn't used much because the person making the decisions doesn't have to justify them to anybody, only the result, and the Risk Premium doesn't affect that...

26. We don't use such a hated concept, and we don't know what value they give it at the corporate level in the United States.

27. I define a minimum project profitability that all projects have to exceed.

28. Mostly we just do comps.

29. What if companies in Resources segment in Russia never in the past generated free-cash flow? Even in the years when commodity prices were extremely high. What will change in future? Companies become less acquisitive? No. Companies focus on free cash flow? No. Management focuses on Growth no matter how much free cash flow it costs to achieve it. Owners focus on maximizing share price and again they don't care how much it will cost to achieve in terms of free cash flow. So while dividends are paid out from Net income and not from free cash flow investors will focus also not on free cash flow. So in my opinion the whole notion of free cash flow and DCF is too academic and applicable to only selected few companies that take a long-term horizon which is very rare in public equities.

Exhibit 2 (continued)

30. I do not refer to books and I don't calculate WACC from basic principles. When I calculate cash flows from future mine production, I use a 'rule of thumb' discount rate of 10% and a further (arbitrary) discount rate to proxy remaining project execution risk.

31. I do not use this concept in my investment activities. Moreover, it seems to lead to many absurdities. If, as many say, the equity risk premium were something that could be obtained in the long term, where is the risk that justifies the premium?

32. Our objective is to reach a minimum IRR. In our case, the IRR can be between 12 and 16%.

33. Our models are based on fundamental analysis, personal experience of analysts and what is more important on analysis of macroeconomical and geopolitical factors. We consider analyst's opinion and vision of political games to be the most important when estimating market risk. In our opinion, Russia's stock market cannot be analysed only in traditional ways of fundamental analysis. Due to this I cannot answer 1, 2 questions. As for the 3rd question, our analysts do read a lot of books and articles about stock market and related issues. However, we do not support technical analysis

34. Real WACC 8%.

35. Regarding your message I would like to inform you that I am not directly related to the issue. However, I asked a couple of my colleagues to get their ideas. I will let you know when I receive feedback from them.

36. The ERP and the market prices of equities are dynamic.

37. We are Valuation Consultants and have no involvement in MRP.

38. We are using a blended Cost of Equity of between 9.5%-11% per division. We have not adjusted the risk premium for the artificially low 'risk free rates', as they are a reflection of flight to quality and high risk adverseness in the market place.

39. We cover more than 130 companies in many countries. We use a standardised 10% nominal discount rate is DCF calculations. Given 24 years in finance, I find that while the market may be efficient overall in a general sense, for each individual stock it is not. We also find that investors in different countries have different attitudes to country risk and hence required returns on equity. For example, the London market is more willing to accept a lower return on Russian investments than the United States market. Canada is more comfortable in central American countries than the United Kingdom. Risk, and hence required returns and MRP, like beauty is in the eye of the beholder.

40. We rather boringly use WACCs of 8-9% for large FTSE corporates.

41. We simply use a WACC of 7.5% to 8.0%, depending on the segment.

42. We tend to use a constant WACC over time within our research of either 7% or 8%. We have found within the capital goods sector, the number 1 approach for stock selection (in terms of both annual returns and consistency as an investment strategy) is earnings momentum (e.g. earnings growth or consensus upgrades/downgrade), irrespective of valuation.

Exhibit 2 (continued)

43. We use a 11.5% cost of equity.

44. We use a 14% required rate of return in all of our research since it is the expected performance many investors, on average, demand for an investment in a bank stock (which is my sector focus). I suppose we could say the risk-free rate is 3% to 4% today, so the market risk premium is 10% to 11%, but that may not be the correct way to explain it.

45. We use a flat 9% discount rate in our DCF calculation for oil and gas companies in North America.

46. We use EV/EBITDA, P/E and P/B.

47. We use EV/Sales or EV/EBITDA.

48. We use Ke.

Exhibit 3

Comments of analysts and companies that did provide the MRP used in 2010

1. Reasonable people disagree and unreasonable people may agree on application of CAPM.
2. Risk premia = actual averages derived from data since the year 2000.
3. Equity risk premia applied to individual firms will vary according to individual risk.
4. ROE – Cost of debt.
5. Spain 0.5% higher than United States or UK.
6. Please note that I use the 10-year US Treasury bond rate as my risk-free rate, not the T-bill rate.
7. Possibly an area where a practitioner like me would benefit is whether it makes sense to use different MRP estimates as economic conditions change and/or the use of ranges for cost of capital estimates for valuations/ capital budgeting/ performance measurement etc. The long run historical average seems almost meaningless when one looks at both the standard error of the estimate (7.5% imputation adjusted average with a SE of 23%) and at the ranges/volatility of annual estimates.
8. Risk is increasing with market crashes, not identified in historical calculations in my view. Check the second edition of "Security Analysis On Wall Street" (John Wiley & Sons, 2010).
9. Different companies use different MRP depending on the expectation of return.
10. As this premium is so hotly debated, I've decided to continue to use the practitioner norm from the valuation industry.
11. Apart from the MRP (5%), we also introduce a country risk premium (CRP) based on Damodaran.
12. I take the previous year's premium as a reference and increase or decrease it according to entirely subjective and arguable criteria.
13. Even though DCF valuations are very rare in Leveraged Finance (and non-existent in Project Finance), we have occasionally used them for Loan to Enterprise Value analyses, either internally or by third parties (including financial Sponsors). The last value that we used/obtained for the MRP (as a premium over Risk Free Rate) was 6%. We did no analysis in 2009.
14. The investment of the average market ERP less the value of the "risk-free" money applied to the same period t gives me the risk premium. The estimated ERP for the IBEX 2010 is 12.53; then we subtract 7.78, being the 5 year swap rate (we estimate 5 years as a typical investment), giving us 5.38%. To calculate 2009 with the volume that we had makes the data vary widely, and the ERP fluctuates between 8 and 13. But taking a rough average with a 5 year swap rate of 2.8%, I get a PdR of 7%.
15. Our company's WACC in 2009 was between 7 and 10%, and this is what we tend to use in valuations.
16. Emerging Markets Bond Index (EMBI) + 550bp

Exhibit 3 (continued)

17. In 2009 and 2010, the return that investors demanded on their own disbursed funds was 20%, implying that the MRP is 16%.

18. Of course there have been significant changes to the expectations on the markets between 2008 and 2009 and historical series have radically changed. However expectations for the long term are still difficult to foresee, and risks for the long term could be considered similar to 2009. Of course all these considerations will be verified during 2010, because, especially when examining statistic parameters, the crisis has no precedent and it is difficult to understand.

19. However, it is my belief that historical data results in an overestimation of the MRP. I subscribe to the view that the United States and the world have had a better the expected realization over the last 50 years with respect to the long-run growth of the economy and the riskiness of treasuries. Thus, my MRP is downweighted somewhat.

20. I have been an Investment professional (analyst, portfolio manager and investment manager) in the market for 30 years and I have drawn the conclusion that 6% (MRP over local long bond rate) is a fair long-term reflection of the market premium, but with considerable volatility about the mean. I am a supporter of EVA and similar concepts.

21. I have not changed the rate since there is no significant change in risk perception in the market place and industry in general.

22. I strongly believe that it is the long term risk premium that is interesting when doing equity valuation and that the long term risk premium does not change. If you take the markets present risk premium in to the equation, you'll simply end up finding the market price, and equity as an asset will never be cheap or expensive. Also I believe that in my talks with investors it is my estimates for the individual company that should be in focus and not my assessment of the market risk. Changes in a target price should be driven by change of estimates and not changes in market risk premium.

23. I think 5% ERP is already low enough, I've seen people using lower figures but do not agree with that, speacially in EM.

24. I think the risk is very low and the prospects for appreciation are huge.

25. Ibbotson and Goetzmann, I'm a Yale School of Mgmt grad.

26. In Australia, there are a significant number of regulatory decisions, which use the CAPM framework and go through a public consultation process. There are a significant number of submissions made on CAPM with expert opinions provided.

27. In fact, I distinguish passive premiums (asset classes, the numbers I gave) and active premiums (via TAA).

Exhibit 3 (continued)

28. I work with Sharpe ratio (0.3 for passive / strategic phase in developed markets – a bit more on emerging markets – and 0.4 or 0.5 for TAA) and the anticipation of volatility for each market. I exclude voluntarily an economic approach here because I want to use the structural value of the asset classes. I have another phase that alters the premium on the economic cycle.

29. Treasury bills plus between 3 and 4%, based on studying 100 years of global stock markets.

30. Now I give higher value to money, having lived through the finaincial crisis of 2008, and would now demand a higher rate of return than previously.

31. I do not use books, because they're not going to tell me my expectations.

32. MRP in Vietnam is strongly connected with real estate and stocks market (the most booming and beneficial market in Vietnam).

33. MRP varies with the risk free rate as measured by 10 Year Treasuries.

34. No books or articles are relevant, since there is no research which can take account of crisis or post-crisis scenarios.

35. Pm= 10%-4% = 6%.

36. Presently I am asking for the sponsors of the projects I valuate to estimate directly a "subjective" required return to unlevered equity, Ku. It ranges from 10% to 10%, real.

37. Risk Premium = the difference between Variable Yield and Fixed Yield in Spain since 1980.

38. As a subsidiary of a multinational group we are forced to use WACC's provided by HQs. The latest update of WACC's (by business unit) to be used was issued in Sep 09. The MRP of 4.5% remained unchanged compared to the previous year.

39. The implications of the Financial Crisis will further challenge entrepreneurs as they seek capital to finance expansion or undertake strategic acquisitions. This point is highlighted by the United States national Debt to Capital ratio in 2004 of 2.33, where total corporate debt equaled $12.1 trillion versus $5.2 trillion in corporate equity. This contrasts with the same ratio at the end of 2008 of 1.35, with $9.6 trillion in debt and $7.1 trillion in equity. Themes for United States businesses will likely continue to include:

40. The underlying risk premium is derived from regression approach of OSEBX vs. World index.

41. We use the interbank CD rate (CDI) as the benchmark for risk free rate. This rate is published by Banco Central and is currently at 8.75. The future rate indicated by the market goes from 10 to 11% for the second half. Consequently a MRP at 9.75% is an acceptable benchmark.

42. I am increasingly convinced that the stock market (in Spain's case, at least), instead of being "monitored" by the CNMV [the government agency regulating financial securities markets in Spain], should be supervised by the State Lottery!

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